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Request For Continued Examination (RCE) Transmittal Address to: Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	09/869,365
	Filing Date	9/25/2001
	First Named Inventor	Boman
	Art Unit	2879
	Examiner Name	K. Guharay
	Attorney Docket Number	GOTE.P-044

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicants does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
- a. ☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ii. ☒ Other Amendment of 11/18/03, Supplemental Response of 12/15/03 and Applicants' Interview Summary of 1/13/04
- b. ☒ Enclosed
- i. ☐ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☒ Other copy of 1/13/04 paper (not in PAIR)
2. **Miscellaneous**
- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17 (i) required)
- b. ☐ Other _____
3. **Fees** The RCE fee under 37 CFR 1.17 (e) is required by 37 CFR 1.114 when the RCE is filed.
- a. ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 15-0610
- i. ☐ RCE fee required under 37 CFR 1.17 (e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☒ Other any additional fees
- b. ☐ Check in the amount of \$ _____ enclosed
- c. ☒ Payment by credit card (Form PTO-2038 enclosed)
- WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED			
Name (Print/Type)	Marina T. Larson, Ph.D.	Registration No. (Attorney/Agent)	32038
Signature	<i>Marina T. Larson</i>	Date	March 23, 2004

CERTIFICATE OF MAILING OR TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.			
Name (Print/Type)	Marina T. Larson	Date	March 23, 2004
Signature	<i>Marina T. Larson</i>		

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1460, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Application No.: 09/869,365

Filed: 9/25/2001

Title: Gas Discharge Tube

Attorney Docket No.: GOTE.P-044

Customer No.: 021121

Group Art Unit: 2879

Examiner: Karabi Guharay

Confirmation No.: 3983

Commissioner for Patents
 PO Box 1450
 Alexandria, VA 22313-1450

APPLICANTS' INTERVIEW SUMMARY

Dear Sir:

Applicants thank Examiner Guharay for taking the time to meet with their representative. This paper is submitted as a summary of that interview, and to provide the supplemental remarks as requested by the Examiner.

Applicants hereby request an extension of time to run through January 18, 2004, and enclose the fee. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 15-0610.

The first topic discussed at the interview was the declaration of the inventors, the signed copy of which was filed on December 15, 2003. This declaration shows comparative results for gas discharge tubes prepared by two methods: one set (tubes 1-20) that were prepared by simply pencil drawing carbon onto the electrode surface, and one set (tubes 21-40) prepared in accordance with the invention by physical vapor deposition. As is apparent from the results on pages 3 and 4 of the declaration, the performance of the two sets of discharge tubes is very

I hereby certify that this paper and any attachments named herein are transmitted to the United States Patent and Trademark Office, Fax number: (703) 872-9306 on January 13, 2004.

Marina T. Larson
 Marina T. Larson, PTO Reg. No. 32,038

January 13, 2004
 Date of Signature

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Filed: 9/25/2001	Examiner: Karabi Guharay
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Interview Summary Dated: January 13, 2004

different. Thus, it is not reasonable to assume, as the Examiner has done in this case, that the manner in which the carbon is deposited is irrelevant to the physical structure, and that the product-by-process language may therefore be ignored in considering the claims.

The Examiner and Applicants' attorney also discussed the standards for a rejection in a case of a product-by-process claim as defined in the MPEP, § 2113. That section states that "Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product." In the present case, the Examiner has never provided a "rationale" for why the products of the present invention and those of the cited art would be expected to provide the same physical structure. Furthermore, given the evidence in the declaration that the manner of the carbon deposition does matter, Applicants submit that such a rationale is appropriately provided if the rejection is to be maintained.

During the interview, claim 22 and the art cited against that claim was also discussed. Claims 22, 23, 30, 31, 33 and 34 stand rejected over the combination of Haas et al and Culbertson et al. Culbertson is cited for a teaching of carbon layers containing metal, and the Examiner argued that adding metal to the device of Haas would therefore have been obvious. As was pointed out at the interview, this combination of references appears inappropriate when the references are considered in more detail. In particular, the Haas references relates to a method for improving electrode coatings by treating them with a pulsed current. As stated at Col. 1, lines 26 et seq, the purpose of the carbon coating in the Haas electrodes is to "improve device performance by **increasing** electron emission and thereby enhancing plasma discharge in the gap." In contrast, the purpose of the carbon/metal layer in Culbertson is to provide an electrode with less electron emissivity, that is an electrode that is "non-electron emissive." as a result of incorporation of materials that inhibit electron emission. (Col. 1, line 73-Col. 2, lines 5; Col. 4 lines 35-38). It is respectfully submitted that the opposing purposes of the two references renders it impossible to find a suggestion in the art to combine the references as the Examiner has done. Thus, withdrawal of this rejection is respectfully urged.

Respectfully Submitted,



Marina T. Larson, Ph.D
Attorney/Agent for Applicant(s)
Reg. No. 32038
(970) 468 6600